

Title: **Tender Technical Evaluation
Strategy Medupi Power Station:
Water Treatment Plant
Combined Scope**

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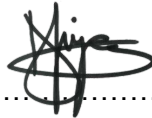
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1. INTRODUCTION

This document provides the technical evaluation strategy for the Medupi Power Station Water Treatment Plant combined scope of works [3]. The scope of work includes the following systems: Laboratories modifications (clean, oil and coal lab), semi-bulk chemicals (Hydrochloric Acid (HCl) and Sodium Hypochlorite (NaOCl)), Condensate Polishing Plant (CPP) measure tanks (Sulfuric acid (H₂SO₄) and sodium hydroxide(NaOH)), Reverse Osmosis (RO) pH control, Ultra Filtration (UF) control valves, Potable Water Disinfection (Chlorine Dioxide(ClO₂)) ,Replacement of corroded components, the upgrade of the Effluent Neutralisation Sump Pumps raw water clarifier overflow pipes, relocation of polymer and coagulant dosing points and the lowering of the coagulant dosing pumps suction.

2. SUPPORTING CLAUSES

2.1 SCOPE

The scope of this document is limited to the criteria that will be used in the performance of the tender technical evaluation of the Medupi Water Treatment Plant Combined scope as received from Medupi Procurement.

The scope of work has been separated into the following areas:

- a. Clean Laboratory modifications
- b. Oil Laboratory modifications
- c. Coal Laboratory modifications
- d. HCl dosing system
- e. NaOCl fumes
- f. Corroded components replacement
- g. Potable water disinfection (ClO₂)
- h. CPP measuring tanks venting
- i. RO pH control
- j. UF control valves
- k. Effluent neutralisation sump (ENS) pumping system upgrade
- l. WTP Raw water clarifier overflow pipes
- m. Relocation of polymer and coagulant dosing points
- n. Lowering of coagulant dosing pump suction point

The following work areas have been grouped together for tender submissions. These grouped areas will be evaluated collectively under a single umbrella and scored accordingly. Tender submissions must clearly specify which work area(s) the tenderer is bidding for.

1. Work area 1- (item a, b, c)
2. Work area 2- (Item d, e, f, h and i)
3. Work area 3- (G)
4. Work area 4- (J, k, L, m, n)

2.1.1 Purpose

The purpose of this tender technical evaluation strategy is to define the Mandatory Evaluation Criteria, Qualitative Evaluation Criteria and Technical Evaluation Team (TET) member responsibilities for tender technical evaluation for the Medupi WTP combined scope. The technical evaluation strategy serves as the basis for the tender technical evaluation process.

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2.1.2 Applicability

This strategy is applicable to the Medupi Power Station Water Treatment Plant combined scope of works tender evaluation.

2.2 NORMATIVE/INFORMATIVE REFERENCES

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

- [1] 240-168966153: Generation Tender Technical Evaluation Procedure.
- [2] 348 – 10000497: Medupi Water Treatment Plant Combined Scope.

2.2.2 Informative

- [3] 32-1034: Eskom Procurement Policy.

2.3 DEFINITIONS

2.3.1 Classification

Controlled Disclosure: Controlled Disclosure to external parties (either enforced by law, or discretionary).

2.4 ABBREVIATIONS

Abbreviation	Description
CV	Curriculum Vitae
ECSA	Engineering Council of South Africa
ITP	Inspection and Testing Plan
KKS	Kraftwerk-kennzeichen System
LDE	Lad Discipline Engineer
LPS	Low Pressure Services
LV	Low Voltage
PLC	Programmable Logic Controller
QCP	Quality Control Plan
RO	Reverse Osmosis
SHEQ	Safety Health Environment and Quality
SOW	Scope of Work
UF	Ultra Filtration
WTP	Water Treatment Plant

2.5 ROLES AND RESPONSIBILITIES

Roles and Responsibilities as defined in the Generation Tender Technical Evaluation Procedure 240-168966153 [1].

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2.6 PROCESS FOR MONITORING

The primary process for monitoring will be governed by the Generation Tender Evaluation procedure [1].

2.7 RELATED/SUPPORTING DOCUMENTS

The Scope of Work [348 – 10000497] is the reference for the approved Tender Returnable.

3. TENDER TECHNICAL EVALUATION STRATEGY

3.1 TECHNICAL EVALUATION THRESHOLD

In order to be eligible for evaluation, the tenderer shall meet all the mandatory requirements.

The evaluation of tenders will be based on the tenderer's ability to meet the requirements specified for the Employer's Requirements set out in the 348 – 10000497: Medupi Water Treatment Plant Combined Scope. A weighted score card approach will be used to evaluate the tenders against the Employer's requirements. The following scoring method will be used in general. It will be specified where other scoring methods is used.

Table 1: Scoring Method

SCORE	PERCENTAGE	DESCRIPTION
5	100	COMPLIANT ☐ Meet technical requirement(s)/AND; ☐ No foreseen technical risk(s) in meeting technical requirements.
4	80	COMPLIANT WITH ASSOCIATED QUALIFICATIONS ☐ Meet technical requirement(s) with; ☐ Acceptable technical risk(s) AND/OR; ☐ Acceptable exceptions AND/OR; ☐ Acceptable conditions.
2	40	NON-COMPLIANT ☐ Does not meet technical requirement(s) AND/OR; Unacceptable technical risk(s) AND/OR; ☐ Unacceptable exceptions AND/OR; ☐ Unacceptable conditions.
0	0	TOTALLY DEFICIENT OR NON-RESPONSIVE

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3.2 TET MEMBERS

Table 2: TET Members

TET number	TET Member Name	Designation
TET 1	Mahlatse Bosega	Chemical Engineer
TET 2	Sumayyah Sulliman	Chief Chemical Engineer
TET 3	Ernest Sithole	Mechanical Engineer
TET 4	Kudzai Pakachena	Mechanical Engineer
TET 5	Tavonga Mudamburi	C&I Engineer
TET 6	Siphamandla Mfusi	C&I Engineer
TET 7	Monwabisi James	Civil Engineer
TET 8	Thomas Chambale	Civil Engineer
TET 9	Hassen Cassim	Snr Advisor (Corrosion)

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3.3 WORK AREA 1 TECHNICAL EVALUATION CRITERIA

Work area 1 evaluation strategy and supporting criteria described in the following sections will be used to evaluate qualifying bids. The following areas are in work area 1:

- a. Clean Laboratory modifications
- b. Oil Laboratory modifications
- c. Coal Laboratory modifications

3.3.1 Work Area 1 Technical Evaluation Scores

Work area 1 evaluation scores will be weighted according to:

Table 3: Work Area 1 Evaluation Scores

Technical: 100 %	
Engineer(s)/Technologist (s) Experience	30
Bidder Company background and experience	35
Detailed Project Execution Methodology	35

The minimum threshold is set at 70%.

3.3.2 Work Area 1 Mandatory Technical Evaluation Criteria

Table 4: Work Area 1 Mandatory Technical Evaluation Criteria

	Mandatory Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria
3.3.2.1.	Certification of the civil and structural engineering works	Submission of completed competency declaration form(s) for the role(s) of Professional Civil and Structural design Engineer(s)/Technologist(s), who shall be appointed for the certification of the works. Note: the role of Civil and Structural designers may be accepted by one or more professionals. All accountable professionals to complete and submit individual competency declaration forms, refer to form Appendix A: Competency Declaration Form – Civil/Structural The competency declaration form must be signed by the professional who will be certifying the works.	South African legislative requirement for all individual performing engineering design work and approving designs.
3.3.2.2.	Certification of the Mechanical engineering works	Submission of completed competency declaration form for the role of Professional Mechanical design Engineer/Technologist, who shall be appointed for the certification of the works. The accountable professionals to complete and submit individual competency declaration forms, refer to form Appendix B: Competency Declaration Form – Mechanical The competency declaration form must be signed by the professional who will be certifying the works.	South African legislative requirement for all individual performing engineering design work and approving designs.

3.3.3 Work Area 1 Qualitative Technical Evaluation Criteria

Table 5: Work Area 1 Qualitative Technical Evaluation Criteria

	Qualitative Technical Criteria Description		Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
3.3.3.1	Technical Requirements			100	
	3.3.3.1.1	Mechanical Engineer(s)/Technologist (s) Experience	CV(s) of ECSA Registered Professional Engineer(s) /Technologist(s) a) Minimum 3 years post ECSA registration in HVAC design and implementation b) CV(s) to show project name, description, roles and responsibility undertaken.	30	5- Professional(s) has 3+ years relevant experience and CV(s) fully compliant. 4- Professional(s) has 2 years relevant experience and CV(s) fully compliant. 2- Professional(s) has less than 2 years relevant experience and CV(s) fully compliant. 0- No CV(s) received, or CV(s) does not show relevant. experience
	3.3.3.1.2	Bidder Company background and experience on HVAC projects	Bidder's experience with respect to specific aspects of the same/comparable projects over the past 10 years specifically relating to the development, extension, installation, renewal, removal, renovation, alteration or dismantling of HVAC: NB: The reference letters or completion certificate to contain the following but not limited to client's information.	35	5- 4 or more x reference letters or completion certificates 4- 3 x reference letters or completion certificates

			Reference Letter • Dated Reference Letter, with, • Client's Contactable details (e.g., Physical Address, e-mail, logo, Telephone, etc.). • Awarded Description/scope of the work. • Signed. Or Completion certificate • Dated Completion certificate with, • Client's Contactable details (e.g., Physical Address, e-mail, logo, Telephone, etc.) • Awarded Description/scope of the work. • Signed. (References/Completion certificates are subject to validation by Eskom, which may include a site inspection if deemed necessary).		2- 1 or 2 x reference letters or completion certificates 0- No reference letters or completion certificates Not related to works
	3.3.3.1.3	Comprehensive Project Execution Methodology	Submit a comprehensive Project Execution methodology covering the full project lifecycle, which demonstrate an understanding of the scope and integration into existing systems and operations. The project execution methodology relevant to the Scope of Work to cover the following: • Project lifecycle coverage: design development, procurement and supply chain approach, construction and installation, commissioning and testing, Handover and closeout procedures • Execution: Project team roles and responsibilities, schedule and critical milestones, integration plan with existing	35	5 – Methodology covers all components in detail and demonstrates strong understanding of scope and risks 4 –Methodology has 1 key item missing or lacking 2 – Methodology has more than 1 key item missing 0 – No submission or not related to works

			infrastructure and systems, Risk mitigation and contingency measures • Quality, safety, and compliance: quality assurance/control procedures, safety plans and adherence to construction regulations, compliance with technical specifications and standards • Performance and monitoring: key performance indicators, progress reporting mechanisms, client communication and approval gates.		
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3.3.4 Work Area 1 TET Members Responsibilities

Table 6: Work Area 1 TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6	TET 7	TET 8	TET 9
3.3.2.1.							X	X	
3.3.2.2.			X	X					
Qualitative Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6	TET 7	TET 8	TET 9
3.3.3.1.1			X	X					
3.3.3.1.2	X	X	X	X					
3.3.3.1.3	X	X	X	X					

3.4 WORK AREA 2 TECHNICAL EVALUATION STRATEGY

Work area 2 evaluation strategy and supporting criteria described in the following section will be used to evaluate qualifying bids. The following areas are in work area 2:

- d. HCl dosing system
- e. NaOCl fumes
- f. Corroded components replacement
- h. CPP measuring tanks venting
- i. RO pH control

3.4.1 Work Area 2 Technical Evaluation Scores

Work area 2 evaluation scores will be weighted according to:

Table 7: Work Area 2 Evaluation Scores
Technical: 100 %

Technical: 100 %	
Engineer(s)/Technologist (s) Experience	30
Bidder Company background and experience	35
Detailed Project Execution Methodology	35

The minimum threshold is set at 70%.

3.4.2 Work Area 2 Mandatory Technical Evaluation Criteria

Table 8: Work Area 2 Mandatory Technical Evaluation Criteria

	Mandatory Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria
3.4.2.1	Certification of the Mechanical engineering works	Submission of completed competency declaration form for the role of Professional Mechanical design Engineer/Technologist, who shall be appointed for the certification of the works. The accountable professionals to complete and submit individual competency declaration forms, refer to form Appendix B: Competency Declaration Form – Mechanical The competency declaration form must be signed by the professional who will be certifying the works.	South African legislative requirement for all individual performing engineering design work and approving designs.
3.4.2.2	Chemical ECSA Professional Registration	Submission of completed competency declaration form(s) for the role(s) of Professional chemical design Engineer(s)/Technologist(s), who shall be appointed for the certification of the works. Note: the role of Chemical designers may be accepted by one or more professionals. All accountable professionals to complete and submit individual competency declaration forms, refer to form Appendix C: Competency Declaration Form – Chemical The competency declaration form must be signed by the professional who will be certifying the works.	South African legislative requirement for all individual performing engineering design work and approving designs.

3.4.3 Work Area 2 Qualitative Technical Evaluation Criteria

Table 9: Work Area 2 Qualitative Technical Evaluation Criteria

	Qualitative Technical Criteria Description		Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
3.4.3.1	Technical Requirements				
	3.4.3.1.1	Chemical Engineer(s)/Technologist (s) Experience	CV(s) of ECSA Registered Professional Engineer(s) /Technologist(s) a) Minimum 3 years post ECSA registration in chemical dosing, scrubber design and implementation b) CV(s) to show project name, description, roles and responsibility undertaken.	30	5- Professional(s) has 3+ years relevant experience and CV(s) fully compliant. 4- Professional(s) has 2 years relevant experience and CV(s) fully compliant. 2- Professional(s) has less than 2 years relevant experience and CV(s) fully compliant. 0- No CV(s) received, or CV(s) does not show relevant experience
	3.4.3.1.2	Bidder Company background and experience on chemical dosing, scrubber system design and implementation project in industrial water treatment	Bidder's experience with respect to specific aspects of the same/comparable projects over the past 10 years specifically relating to design and implementation of chemical dosing and scrubber system in industrial water treatment	35	5- 4 or more x reference letters or completion certificates 4- 3 x reference letters or completion certificates

			NB: The reference letters or completion certificate to contain the following but not limited to client's information. Reference Letter • Dated Reference Letter, with, • Client's Contactable details (e.g., Physical Address, e-mail, logo, Telephone, etc.). • Awarded Description/scope of the work. • Signed. Or Completion certificate • Dated Completion certificate with, • Client's Contactable details (e.g., Physical Address, e-mail, logo, Telephone, etc.). • Awarded Description/scope of the work. • Signed. (References/Completion certificates are subject to validation by Eskom, which may include a site inspection if deemed necessary)		2- 1-2 x reference letters or completion certificates 0- No reference letters or completion certificates / Not related to works
	3.4.3.1.3	Comprehensive Project Execution Methodology	Submit a comprehensive Project Execution methodology covering the full project lifecycle, which demonstrate an understanding of the scope and integration into existing systems and operations. The project execution methodology relevant to the Scope of Work to cover the following: • Project lifecycle coverage: design development, procurement and supply chain approach, construction and installation, commissioning and testing, Handover and closeout procedures	35	5– Methodology covers all components in detail and demonstrates strong understanding of scope and risks 4 –Methodology has 1 key item missing or lacking

			• Execution: Project team roles and responsibilities, schedule and critical milestones, integration plan with existing infrastructure and systems, Risk mitigation and contingency measures • Quality, safety, and compliance: quality assurance/control procedures, safety plans and adherence to construction regulations, compliance with technical specifications and standards • Performance and monitoring: key performance indicators, progress reporting mechanisms, client communication and approval gates.		2 – Methodology has more than 1 key missing 0 – No submission or not related to works
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3.4.3 Work Area 2 TET Members Responsibilities

Table 10: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6	TET 7	TET 8	TET 9
3.4.2.1			X	X					
3.4.2.2	X	X							
Qualitative Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6	TET 7	TET 8	TET 9
3.4.3.1.1	X	X							
3.4.3.1.2	X	X							
3.4.3.1.3	X	X	X	X					

3.5 WORK AREA 3 TECHNICAL EVALUATION STRATEGY

Work area 3 evaluation strategy and supporting criteria described in the following section will be used to evaluate qualifying bids. The following areas are in work area 3:

- g. Potable water disinfection (ClO₂)

3.5.1 Work Area 3 Technical Evaluation Scores

Work area 3 evaluation scores will be weighted as follows according to:

Table 11: Work Area 3 Evaluation Scores

Technical: 100 %	
Engineer(s)/Technologist (s) Experience	30
Bidder Company background and experience	35
Detailed Project Execution Methodology	35

The minimum threshold is set at 70%.

3.5.2 Work Area 3 Mandatory Technical Evaluation Criteria

Table 12: Work Area 3 Mandatory Technical Evaluation Criteria

	Mandatory Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria
3.5.2.1	Certification of the Mechanical engineering works	Submission of completed competency declaration form for the role of Professional Mechanical design Engineer/Technologist, who shall be appointed for the certification of the works. The accountable professionals to complete and submit individual competency declaration forms, refer to form Appendix B: Competency Declaration Form – Mechanical The competency declaration form must be signed by the professional who will be certifying the works.	South African legislative requirement for all individual performing engineering design work and approving designs.
3.5.2.2	Chemical ECSA Professional Registration	Submission of completed competency declaration form for the role of Professional Chemical design Engineer/Technologist, who shall be appointed for the certification of the works. The accountable professionals to complete and submit individual competency declaration forms, refer to form Appendix C: Competency Declaration Form – Chemical	South African legislative requirement for all individual performing engineering design work and approving designs.
3.5.2.3	ECSA Professional Registration C&I (Electronics/Electrical)	Submission of completed competency declaration form for the role of Professional C&I design Engineer/Technologist, who shall be appointed for the certification of the works.	South African legislative requirement for all individual performing engineering design work and approving designs.

		The accountable professionals to complete and submit individual competency declaration forms, refer to form Appendix D: Competency Declaration Form – C&I	
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3.5.3 Work Area 3 Qualitative Technical Evaluation Criteria

Table 13: Qualitative Technical Evaluation Criteria

	Qualitative Technical Criteria Description		Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
3.5.3.1	Technical Requirements			100	
	3.5.3.1.1	Chemical Engineer(s)/Technologist (s) Experience	CV(s) of ECSA Registered Professional Engineer(s) /Technologist(s) a) Minimum 3 years in post ECSA registration in design and implementation of potable water disinfection using chlorine dioxide b) CV(s) to show project name, description, roles and responsibility undertaken.	30	5- Professional(s) has 3+ years relevant experience and CV(s) fully compliant. 4- Professional(s) has 2 years relevant experience and CV(s) fully compliant. 2- Professional(s) has less than 2 years relevant experience and CV(s) fully compliant. 0- No CV(s) received, or CV(s) does not show experience relevant to the technical specification.
	3.5.3.1.2	Submit bidder company experience on potable water disinfection using chlorine dioxide in industrial water treatment	Reference letter or completion certificate or SOW relating potable water disinfection using chlorine dioxide over the past 10 years for industrial water treatment: NB: The reference letters or completion certificate to contain the following as a minimum but not limited to client's information.	35	5- 4 or more reference letters or completion certificates

			Reference Letter: • Dated Reference Letter, with, • Client's Contactable details (e.g., Physical Address, e-mail, logo, Telephone, etc.). • Awarded Description/scope of the work. • Signed. Or Completion certificate • Dated Completion certificate with, • Client's Contactable details (e.g., Physical Address, e-mail, logo, Telephone, etc.) • Awarded Description/scope of the work. • Signed. (References/Completion certificates/SOW are subject to validation by Eskom, which may include a site inspection if deemed necessary).		4- 3 reference letters or completion certificates 2- (1-2) reference letters or completion certificates 0- No reference letters or completion certificates submitted or Not related to works
	3.5.3.2.3	Comprehensive Project Execution Methodology	Submit a comprehensive Project Execution methodology covering the full project lifecycle, which demonstrate an understanding of the scope and integration into existing systems and operations. The project execution methodology relevant to the Scope of Work to cover the following: • Project lifecycle coverage: design development, procurement and supply chain approach, construction and installation, commissioning and testing, Handover and closeout procedures • Execution: Project team roles and responsibilities, schedule and critical	35	5- Methodology covers all components in detail and demonstrates strong understanding of scope and risks 4- Methodology covers has 1 key item missing or lacking

			milestones, integration plan with existing infrastructure and systems, Risk mitigation and contingency measures - Quality, safety, and compliance: quality assurance/control procedures, safety plans and adherence to construction regulations, compliance with technical specifications and standards - Performance and monitoring: key performance indicators, progress reporting mechanisms, client communication and approval gates.		2– Methodology has more than 1 key missing 0– No submission or not related to works
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3.5.4 Work Area 3 TET Members Responsibilities

Table 14: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6	TET 7	TET 8	TET 9
3.5.2.1			X	X					
3.5.2.2	X	X							
3.5.2.3					X	X			
Qualitative Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6	TET 7	TET 8	TET 9
3.5.3.1.1	X	X							
3.5.3.1.2	X	X							
3.5.3.1.3	X	X							

3.6 WORK AREA 4 TECHNICAL EVALUATION STRATEGY

Work area 4 evaluation strategy and supporting criteria described in the following sections will be used to evaluate qualifying bids. The following areas are in work area 4:

- j. UF control valves
- k. Effluent neutralisation sump (ENS) pumping system upgrade
- l. WTP Raw water clarifier overflow pipes
- m. Relocation of polymer and coagulant dosing points
- n. Lowering of coagulant dosing pump suction point

3.6.1 Work Area 4 Technical Evaluation Scores

Work Area 4 evaluation scores will be weighted according to:

Table 15: Work Area 4 Evaluation Scores

Technical: 100 %	
Engineer(s)/Technologist (s) Experience	20
Chemist Experience	10
Bidder Company background and experience	25
Detailed Project Execution Methodology	25
Bidder Company background and experience (corrosion protection)	20

The minimum threshold is set at 70%.

3.6.2 Work Area 4 Mandatory Technical Evaluation Criteria

Table 16: Work Area 4 Mandatory Technical Evaluation Criteria

	Mandatory Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria
3.6.2.1.	Certification of the civil and structural engineering works	Submission of completed competency declaration form(s) for the role(s) of Professional Civil and Structural design Engineer(s)/Technologist(s), who shall be appointed for the certification of the works. Note: the role of Civil and Structural designers may be accepted by one or more professionals. All accountable professionals to complete and submit individual competency declaration forms, refer to form Appendix A: Competency Declaration Form – Civil/Structural The competency declaration form must be signed by the professional who will be certifying the works.	South African legislative requirement for all individual performing engineering design work and approving designs.
3.6.2.2	Certification of the Mechanical engineering works	Submission of completed competency declaration form for the role of Professional Mechanical design Engineer/Technologist, who shall be appointed for the certification of the works. The accountable professionals to complete and submit individual competency declaration forms, refer to form Appendix B: Competency Declaration Form – Mechanical. The competency declaration form must be signed by the professional who will be certifying the works.	South African legislative requirement for all individual performing engineering design work and approving designs.

3.6.2.3	Chemical ECSA Professional Registration	Submission of completed competency declaration form for the role of Professional Chemical design Engineer/Technologist, who shall be appointed for the certification of the works. The accountable professionals to complete and submit individual competency declaration forms, refer to form Appendix C: Competency Declaration Form – Chemical The competency declaration form must be signed by the professional who will be certifying the works.	South African legislative requirement for all individual performing engineering design work and approving designs.
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3.6.3 Work Area 4 Qualitative Technical Evaluation Criteria

Table 17: Wok Area 4 Qualitative Technical Evaluation Criteria

	Qualitative Technical Criteria Description		Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
3.6.3.1	Technical Requirements			100	
	3.6.3.1.1	Process Engineer(s)/Technologist (s) Experience	CV(s) of ECSA Registered Professional Engineer(s) /Technologist(s) c) Minimum 3 years post ECSA registration in design and implementation of pumps, valve and piping systems in industrial water treatment or effluent management. d) CV(s) to show project name, description, roles and responsibility undertaken.	20	5- Professional(s) has 3+ years relevant experience and CV(s) fully compliant. 4- Professional(s) has 2 years relevant experience and CV(s) fully compliant. 2- Professional(s) has less than 2 years relevant experience and CV(s) fully compliant. 0- No CV(s) received, or CV(s) does not show relevant experience
	3.6.3.1.2	Chemist Experience	Chemist (s) that can understand neutralisation chemistry a) Minimum 3 years in neutralization chemistry within industrial water treatment or effluent management. b) CV(s) to show project name, description, roles and responsibility undertaken.	10	5- Personnel has 3+ years relevant experience and CV(s) fully compliant. 4- Personnel(s) has 2 years relevant

					experience and CV(s) fully compliant. 2- Personnel(s) has less than 2 years relevant experience and CV(s) fully compliant. 0- No CV(s) received, or CV(s) does not show relevant experience
	3.6.3.1.3	Submit bidder company experience on design and implementation of pumps, valve and piping systems in industrial water treatment or effluent management	Reference letter or completion certificate relating to process control design and implementation projects over the past 10 years for design and implementation of pumps, valve and piping systems in industrial water treatment or effluent management. NB: The reference letters or completion certificate to contain the following as a minimum but not limited to client's information. Reference Letter: • Dated Reference Letter, with, • Client's Contactable details (e.g., Physical Address, e-mail, logo, Telephone, etc.). • Awarded Description/scope of the work. • Signed. Or Completion certificate • Dated Completion certificate with, • Client's Contactable details (e.g., Physical Address, e-mail, logo, Telephone, etc.)	20	5 - 4 or more reference letters or completion certificates 4 - 3 reference letters or completion certificates 2 – (1-2) reference letters or completion certificates 0 - No reference letters or completion certificates submitted/ Not related to works

			• Awarded Description/scope of the work. • Signed. • Signed. (References/Completion certificates/SOW are subject to validation by Eskom, which may include a site inspection if deemed necessary)		
	3.6.3.1.4	Comprehensive Project Execution Methodology	Submit a comprehensive Project Execution methodology covering the full project lifecycle, which demonstrate an understanding of the scope and integration into existing systems and operations. The project execution methodology relevant to the Scope of Work to cover the following: • Project lifecycle coverage: design development, procurement and supply chain approach, construction and installation, commissioning and testing, Handover and closeout procedures • Execution: Project team roles and responsibilities, schedule and critical milestones, integration plan with existing infrastructure and systems, Risk mitigation and contingency measures • Quality, safety, and compliance: quality assurance/control procedures, safety plans and adherence to construction regulations, compliance with technical specifications and standards • Performance and monitoring: key performance indicators, progress	25	5 – Methodology covers all components in detail and demonstrates strong understanding of scope and risks 4 –Methodology has 1 key item missing or lacking 2 – Methodology has more than 1 key missing 0 – No submission or not related to works

			reporting mechanisms, client communication and approval gates.		
	3.6.3.1.5	Submit bidder company experience in corrosion protection projects completed in comparable environment specified in RTD/MAT/21/026 and RTD/MAT/17/60 (option 1) These include: Experience in the application of all corrosion protection systems/technologies, i.e., coatings and linings of the components such as pipes, concrete & structural steel.	Reference letter or completion certificate relating to corrosion protection over the past 5 years on components (pumps, valves, pipes, concrete & structural steel) for each comparable environment specified in RTD/MAT/21/026 and RTD/MAT/17/60 (option 1) NB: The reference letters or completion certificate to contain the following as a minimum but not limited to client's information. Reference Letter: - Dated Reference Letter, with, - Client's Contactable details (e.g., Physical Address, e-mail, logo, Telephone, etc.). - Awarded Description/scope of the work. - Signed. Or Completion certificate - Dated Completion certificate with, - Client's Contactable details (e.g., Physical Address, e-mail, logo, Telephone, etc.) - Awarded Description/scope of the work. - Signed. Or Quality Inspection Plan/ Inspection Test Plan - Dated Completion certificate with, - Client's Contactable details (e.g., Physical Address, e-mail, logo, Telephone, etc.) - Awarded Description/scope of the work.	20	5 – 1 or more reference letters or completion certificates (fully complaint) 4 – Only 1 reference letters or completion certificates fully complaint to RTD/MAT/17/60 (option 1) 2 – Only 1 reference letters or completion certificates fully complaint to RTD/MAT/21/026 0 - No submission or Not related to works

			Signed. (References/Completion certificates are subject to validation by Eskom, which may include a site inspection if deemed necessary)		
--	--	--	---	--	--

3.6.4 Work Area 4 TET Members Responsibilities

Table 18: Work Area 4 TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6	TET 7	TET 8	TET 9
3.6.2.1							X	X	
3.6.2.2			X	X					
3.6.2.3	X	X							
Qualitative Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6	TET 7	TET 8	TET 9
3.6.3.1	X	X							
3.6.3.2	X	X							X
3.6.3.3	X	X	X	X					
3.6.3.4	X	X	X	X					
3.6.3.5	X	X							X

3.7 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.7.1 Risks

Table 19: Acceptable Technical Risks

Risk	Description
1.	Any locally available superior technology alternatives to specifications within the scope are acceptable if the tenderer guarantees that lead times will not impact the submitted preliminary program

Table 20: Unacceptable Technical Risks

Risk	Description
1.	Tender detailed proposal for the process design excludes more than two of the main systems

3.7.2 Exceptions / Conditions

Table 21: Acceptable Technical Exceptions / Conditions

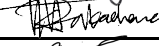
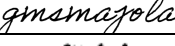
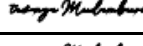
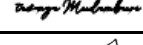
Risk	Description
1.	None

Table 22: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	Scope omissions. Any explicit request for any part of the process scope to be omitted is unacceptable.

4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation	Signature
Sumayyah Sulliman	Chief Chemical Engineer	
Ernest Sithole	Mechanical Engineer	
Mahlatse Bosega	Chemical Engineer	
Kudzai Pakachena	Mechanical Engineer	
Pimani Mugwambane	Mechanical Engineer	
Banele Mbendane	Electrical Engineer	
Rethabile Reteronko	Electrical Engineer	
Gcina Majola	Electrical Engineer	
Tavonga Mudamburi	C&I Engineer	
Siphamandla Mfusi	C&I Engineer	p.p. 
Monwabisi James	Civil Engineer	
Thomas Chambale	Civil Engineer	
Hassen Cassim	Senior Advisor (Corrosion)	
Mduduzi Dhlamini	Senior Configuration Management Technician	
Mandla Paric Nkosi	Senior Configuration Management Technician	

5. REVISIONS

Date	Rev.	Compiler	Remarks
March 2023	0	O Nkomo	Initial draft
March 2023	1	P Nkomo	Issued comments returned
April 2023	2	P Nkomo	Comments addressed-finalised
May 2023	3	P Nkomo	Commercial comments addressed
July 2023	4	P Nkomo	Inconsistencies from previous revisions
August 2023	5	P Nkomo	New resource, new comments to be addressed
November 2024	6	MF Bosega	Corrosion protection requirements for ENS added to document
May 2025	7	MF Bosega	Technical Requirements for closed/Limited tendering

6. DEVELOPMENT TEAM

The following people were involved in the development of this document:

Banele Mbendane

Kudzai Pakachena

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Hassen Cassim
Rethabile Rateronko
Monwabisi James
Ernest Sithole
Mahlatse Bosega
Sumayyah Sulliman
Siphamandla Mfusi
Tavonga Mudamburi

7. ACKNOWLEDGEMENTS

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Zweli Madlopha
Phumlile Nkomo
Willie Beetge
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Noko Pheta
Koketjo Seshoka
Justin Varden
Zak Jiyane
Kedimetse Moloko

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APPENDIX A: COMPETENCY DECLARATION FORM – CIVIL/STRUCTURAL

Medupi Power Station, Certification of works accordance to Scope of Work doc No. 348 – 10000497: Medupi Water Treatment Plant Combined Scope

Declaration as a competent person in terms of Regulation A19 of the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977)

Consideration as a Competent Person in terms of Regulation A19

Section 1: Nature of the project

Nature of the project: Ensuring design intent is achieved and professional certification of constructed works, changes, and additions to works as defined by the scope of work.

Section 2: Details of competent registered professional who will perform the duties of designer for the works

Full name of competent registered professional:

--

Registration council:

--

Professional registration number:

--

Consultancy I am representing:

--

I will be performing the role of

<i>Role as per mandatory criteria</i>		
1	Structural Design Engineer/Technologist	

(Tick the relevant box or both boxes if applicable)

Section 3: Declaration by competent registered professional

I, (Full name)

Telephone number:

Declare that:

1. I fully understand the complete scope of work as defined in the SoW document No. **348 – 10000497:**
Medupi Water Treatment Plant Combined Scope

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2. I am trained, educated, and experienced to undertake the rational design/assessment/investigations and associated construction monitoring of the works defined in the SoW.
3. I have the necessary competency and contextual knowledge to perform the professional services as defined in the SoW:
 - Assessment/analysis of constructed buildings/structures/systems interfacing with works as indicated in the SoW
 - Design and analysis of new buildings/structures/systems as indicated in the SoW
 - Ensure design intent is achieved, through construction monitoring as required by the Construction Regulations, on works to be constructed as indicated in the SoW.
4. I satisfied the necessary and relevant definition of competent person contained in SANS 10400, Construction Regulations and Engineering Council of South Africa.
5. My professional registration is current and not suspended or terminated and is appropriate in relation to the services as defined by the scope of work.
6. I am intending to provide professional services as designer of the works defined in the scope of work.
7. I shall provide my professional services as designer with associated duties as indicated in the Construction Regulations and in accordance with ECSA Code of Conduct.
8. All the information provide is to the best of my knowledge true and correct.

Signature of registered competent professional:

.....

Date:

Note: No part of this declaration may be left blank or incomplete nor indicated as N/A (not applicable).

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APPENDIX B: COMPETENCY DECLARATION FORM – MECHANICAL

**Medupi Power Station, Certification of works accordance to Scope of Work doc No. 348 – 10000497:
Medupi Water Treatment Plant Combined Scope**

**Declaration as a competent person in terms of Regulation A19 of the National Building Regulations and
Building Standards Act, 1977 (Act No. 103 of 1977)**

Consideration as a Competent Person in terms of Regulation A19

Section 1: Nature of the project

Nature of the project: Ensuring design intent is achieved and professional certification of constructed works, changes, and additions to works as defined by the scope of work.

Section 2: Details of competent registered professional who will perform the duties of designer for the works

Full name of competent registered professional:

Registration council:

Professional registration number:

Consultancy I am representing:

I will be performing the role of

<i>Role as per mandatory criteria</i>		
1	Mechanical Design Engineer/Technologist	X

Section 3: Declaration by competent registered professional

I, (Full name)

Telephone number:

Declare that:

1. I fully understand the complete scope of work as defined in the SoW document No. **348 – 10000497:**
Medupi Water Treatment Plant Combined Scope

CONTROLLED DISCLOSURE

When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

2. I am trained, educated, and experienced to undertake the rational design/assessment/investigations and associated construction monitoring of the works defined in the SoW.
3. I have the necessary competency and contextual knowledge to perform the professional services as defined in the SoW:
 - Assessment/analysis of constructed buildings/structures/systems interfacing with works as indicated in the SoW
 - Design and analysis of new buildings/structures/systems as indicated in the SoW
 - Ensure design intent is achieved, through construction monitoring as required by the Construction Regulations, on works to be constructed as indicated in the SoW.
4. I satisfied the necessary and relevant definition of competent person contained in SANS 10400, Construction Regulations and Engineering Council of South Africa.
5. My professional registration is current and not suspended or terminated and is appropriate in relation to the services as defined by the scope of work.
6. I am intending to provide professional services as designer of the works defined in the scope of work.
7. I shall provide my professional services as designer with associated duties as indicated in the Construction Regulations and in accordance with ECSA Code of Conduct.
8. All the information provide is to the best of my knowledge true and correct.

Signature of registered competent professional:

.....

Date:

Note: No part of this declaration may be left blank or incomplete nor indicated as N/A (not applicable)

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APPENDIX C: COMPETENCY DECLARATION FORM – CHEMICAL

**Medupi Power Station, Certification of works accordance to Scope of Work doc No. 348 – 10000497:
Medupi Water Treatment Plant Combined Scope**

**Declaration as a competent person in terms of Regulation A19 of the National Building Regulations and
Building Standards Act, 1977 (Act No. 103 of 1977)**

Consideration as a Competent Person in terms of Regulation A19

Section 1: Nature of the project

Nature of the project: Ensuring design intent is achieved and professional certification of constructed works, changes, and additions to works as defined by the scope of work.

Section 2: Details of competent registered professional who will perform the duties of designer for the works

Full name of competent registered professional:

Registration council:

Professional registration number:

Consultancy I am representing:

I will be performing the role of

<i>Role as per mandatory criteria</i>		
1	Chemical Design Engineer/Technologist	

Section 3: Declaration by competent registered professional

I, (Full name)

Telephone number:

Declare that:

9. I fully understand the complete scope of work as defined in the SoW document No. **348 – 10000497:**
Medupi Water Treatment Plant Combined Scope

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10. I am trained, educated, and experienced to undertake the rational design/assessment/investigations and associated construction monitoring of the works defined in the SoW.
11. I have the necessary competency and contextual knowledge to perform the professional services as defined in the SoW:
 - Assessment/analysis of constructed buildings/structures/systems interfacing with works as indicated in the SoW
 - Design and analysis of new buildings/structures/systems as indicated in the SoW
 - Ensure design intent is achieved, through construction monitoring as required by the Construction Regulations, on works to be constructed as indicated in the SoW.
12. I satisfied the necessary and relevant definition of competent person contained in SANS 10400, Construction Regulations and Engineering Council of South Africa.
13. My professional registration is current and not suspended or terminated and is appropriate in relation to the services as defined by the scope of work.
14. I am intending to provide professional services as designer of the works defined in the scope of work.
15. I shall provide my professional services as designer with associated duties as indicated in the Construction Regulations and in accordance with ECSA Code of Conduct.
16. All the information provide is to the best of my knowledge true and correct.

Signature of registered competent professional:

.....

Date:

Note: No part of this declaration may be left blank or incomplete nor indicated as N/A (not applicable)

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APPENDIX D: COMPETENCY DECLARATION FORM – C&I

**Medupi Power Station, Certification of works accordance to Scope of Work doc No. 348 – 10000497:
Medupi Water Treatment Plant Combined Scope**

**Declaration as a competent person in terms of Regulation A19 of the National Building Regulations and
Building Standards Act, 1977 (Act No. 103 of 1977)**

Consideration as a Competent Person in terms of Regulation A19

Section 1: Nature of the project

Nature of the project: Ensuring design intent is achieved and professional certification of constructed works, changes, and additions to works as defined by the scope of work.

Section 2: Details of competent registered professional who will perform the duties of designer for the works

Full name of competent registered professional:

Registration council:

Professional registration number:

Consultancy I am representing:

I will be performing the role of

<i>Role as per mandatory criteria</i>		
1	C&I Design Engineer/Technologist	

Section 3: Declaration by competent registered professional

I, (Full name)

Telephone number:

Declare that:

17. I fully understand the complete scope of work as defined in the SoW document No. **348 – 10000497:**
Medupi Water Treatment Plant Combined Scope

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When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

18. I am trained, educated, and experienced to undertake the rational design/assessment/investigations and associated construction monitoring of the works defined in the SoW.
19. I have the necessary competency and contextual knowledge to perform the professional services as defined in the SoW:
- Assessment/analysis of constructed buildings/structures/systems interfacing with works as indicated in the SoW
 - Design and analysis of new buildings/structures/systems as indicated in the SoW
 - Ensure design intent is achieved, through construction monitoring as required by the Construction Regulations, on works to be constructed as indicated in the SoW.
20. I satisfied the necessary and relevant definition of competent person contained in SANS 10400, Construction Regulations and Engineering Council of South Africa.
21. My professional registration is current and not suspended or terminated and is appropriate in relation to the services as defined by the scope of work.
22. I am intending to provide professional services as designer of the works defined in the scope of work.
23. I shall provide my professional services as designer with associated duties as indicated in the Construction Regulations and in accordance with ECSA Code of Conduct.
24. All the information provide is to the best of my knowledge true and correct.

Signature of registered competent professional:

.....

Date:

Note: No part of this declaration may be left blank or incomplete nor indicated as N/A (not applicable)

CONTROLLED DISCLOSURE

When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.